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APPALACHIAN MOUNTAIN ADVOCATES

Great Horned Owl © Estate of Roger Tory Peterson.

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August 27, 2015

S. Craig Boggs
Kanawha Energy Company, President
315 70th Street, Suite 200
Charleston, WV 25304

By Certified Mail – Return Receipt Requested

Re: 60-Day Notice of Intent to File Citizen Suit Under Clean Water Act Section 505(a)(1) for Violation of Terms and Conditions of West Virginia NPDES Permit WV1002376, or for Unpermitted Discharges, and 60-Day Notice of Intent to File Citizen Suit Under the Federal Surface Mining Control and Reclamation Act Section 520(a)(1) for Violations of Federal and State Regulations and Permit Conditions of West Virginia Surface Mining Permit S304589

Dear Mr. Boggs:

The Sierra Club, Ohio Valley Environmental Coalition, and the West Virginia Highlands Conservancy (collectively, "the Sierra Club"), in accordance with section 505 of the Clean Water Act (the "Act" or the "CWA"), 33 U.S.C. § 1365, and 40 C.F.R. Part 135, hereby notify you that Kanawha Energy Company ("KEC") has violated, and continues to violate, "an effluent standard or limitation" under Section 505(a)(1)(A) of the Act, 33 U.S.C. § 1365(a)(1)(A), by failing to comply with the terms and conditions of West Virginia/National Pollution Discharge Elimination System ("WV/NPDES") Permit WV1002376. If within sixty days of the postmark of this letter KEC does not bring itself into full compliance with the Act, we intend to file a citizens' suit seeking civil penalties for KEC's ongoing and continuing violations and for an injunction compelling it to come into compliance with the Act.

We further notify you, in accordance with section 520 of the federal Surface Mining Control and Reclamation Act ("SMCRA"), 30 U.S.C. § 1270, and 30 C.F.R. § 700.13, that KEC is in ongoing and continuing violation of certain federal and state regulations promulgated under SMCRA and the West Virginia Surface Coal Mining and Reclamation Act ("WVSCMRA" or the "State Act") and certain permit conditions of its West Virginia Surface Mining Permit S304589 as a result of its discharges of pollutants into Buckles Branch of Twentymile Creek of the Gauley River. If, within sixty days, KEC does not bring itself into full compliance with SMCRA, the regulations promulgated under SMCRA and the WVSCMRA, and Permit S304589,

we intend to file a citizens' suit in federal court seeking an injunction compelling KEC to come into compliance with the applicable statutes, regulations, and permits.

I. FACTUAL BACKGROUND

A. Discharges from the Big Creek No. 2 Mine

On June 19, 1990, the West Virginia Department of Environmental Protection ("WVDEP") issued West Virginia Surface Mining Permit S304589 to Hawks Nest Mining Company for the Big Creek No. 2 Mine in Fayette County, West Virginia. That permit has since been revised multiple times, was transferred to KEC in 2010, and remains in effect. The permit covers approximately 930 acres, 825 of which have been disturbed by surface mining. On June 19, 1990, WVDEP issued WV/NPDES Permit WV1002376 to Hawks Nest Mining Company for this mine. This permit has since been modified multiple times, was transferred to KEC in 2010, and remains in effect. Valley Fills Nos. 4 and 5 on the Big Creek No. 2 Mine fill the headwaters of Buckles Branch. The fills drain into Ponds Nos. 4 and 5 and then discharge through Outlet 038 into Buckles Branch. Valley Fill No. 3 on the Big Creek No. 2 Mine fills the headwaters of the Left Fork of Buckles Branch. Discharges from Valley Fill No. 3 drain into Pond No. 3A and then discharge through Outlet 034 into the Left Fork of Buckles Branch. Neither Outlet 034 nor Outlet 038 has numeric limits on selenium. KEC's Big Creek No. 2 Mine is the only development activity in the Buckles Branch Watershed.

Part C of WV/NPDES Permit WV1002376 incorporates by reference 47 CSR § 30-5.1.f, which provides that: "The discharge or discharges covered by a WV/NPDES permit are to be of such quality so as not to cause violation of applicable water quality standards promulgated by 47CSR2." WVDEP's narrative water quality standards prohibit discharges of "[m]aterials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life" or that cause "significant adverse impacts to the chemical, physical, hydrologic, or biological components of aquatic ecosystems." 47 C.S.R. §§ 2-3.2.e & 2-3.2.i. WVDEP's water quality standard to prevent chronic harm to aquatic life from selenium is 5 µg/L. 47 C.S.R. § 2, App. E, Table 1, § 8.27.

1. Pre-Mining

The original applicant for Surface Mining Permit S304589 provided baseline water quality data to WVDEP in the Probable Hydrologic Consequences section of the application. Among those data were the following measurements of the total dissolved solids ("TDS"), conductivity, sulfates, iron and manganese at in-stream sampling locations, and BCM-10 (38° 13" 59", -81° 11' 45") in Buckles Branch, prior the commencement of mining operations at the Big Creek No. 2 Mine:

Sampling Date	Sampling Location	TDS (mg/L)	Conductivity (µS/cm)	Sulfates (mg/L)	Alkalinity (mg/L $CaCO_3$)	Iron (mg/L)	Manganese (mg/L)
February 27, 1989	BCM-10	272	360	50	90.0	0.06	0.01

March 16, 1989	BCM-10	210	393.75	86	103.4	0.64	0.10
April 4, 1989	BCM-10	196	321.36	54	88.8	0.46	0.09
April 25, 1989	BCM-10	280	442	56	123.0	0.17	0.11

As a part of its application for Revision 3 to S304589, then-permittee Appalachian Mining, Inc. updated the Probable Hydrologic Consequences section, submitting additional water quality data to WVDEP for Buckles Branch at BC-25 (38° 13' 58", -81° 11' 50"). Among those data were the following measurements of TDS, conductivity, sulfates, iron, manganese, and temperature, collected prior to the construction of Valley Fills No. 3, 4, and 5:

Sampling Date	Sampling Location	TDS (mg/L)	Conductivity (µS/cm)	Sulfates (mg/L)	Alkalinity (mg/L $CaCO_3$)	Iron (mg/L)	Manganese (mg/L)
November 30, 1993	BC-25	130	206	33.92	61.20	0.05	<0.05
December 10, 1993	BC-25	141	214	37.01	66.40	<0.03	<0.05
February 22, 1994	BC-25	210	323	46.60	137.90	<0.03	<0.05
March 11, 1994	BC-25	145	204	12.73	53.60	<0.03	<0.05

WVDEP's Watershed Assessment Branch sampled the water quality in the Buckles Branch of Twentymile Creek on or about July 16, 1998. The sample was taken at mile point 0.1 with the approximate coordinates of 38.23299722 N, 81.19569167 W. That sampling effort revealed a conductivity level in Buckles Branch of Twentymile Creek of 418 µS/cm. At the same time, WVDEP determined that Buckles Branch's West Virginia Stream Index ("WVSCI") Score was 79.34. WVDEP considers streams with WVSCI scores above 68 to be biologically unimpaired.

2. During Fill Construction

As a part of its application for Amendment No. 1 to Surface Mining Permit S501300, then-permittee Appalachian Mining, Inc. submitted additional water quality data to WVDEP for Buckles Branch at DSBB. Among those data were the following measurements of the conductivity, iron and manganese collected as the construction of Valley Fills No. 4 and 5 was starting:

Sampling Date	Sampling Location	Conductivity (µS/cm)	Alkalinity (mg/L $CaCO_3$)	Iron (mg/L)	Manganese (mg/L)
October 4, 1999	DSBB	280	96	2.38	0.08
November 1, 1999	DSBB	619	281	<0.05	<0.01

December 1, 1999	DSBB	541	251	<0.05	<0.01
January 10, 2000	DSBB	436	175	<0.05	<0.01
February 3, 2000	DSBB	468	210	<0.05	<0.01
March 1, 2000	DSBB	373	124	0.06	<0.01
April 3, 2000	DSBB	401	134	0.06	<0.01
May 1, 2000	DSBB	324	93	0.13	<0.01
August 9, 2000	DSBB	438	161	0.16	<0.01

WVDEP's Watershed Assessment Branch sampled the water quality in the Buckles Branch of Twentymile Creek for a second time on or about June 29, 2005. The sample was taken at mile point 0.7 with the approximate coordinates of 38.23230556 N, 81.20623056 W. WVDEP reported the following chemistry results:

Parameter	**Result**
pH (SU)	7.55
Hardness (mg/l)	862.6
Chloride (mg/l)	< 10
Specific Conductance (µS/cm)	1650
Sulfate (mg/l)	823
Alkalinity (mg/L $CaCO_3$)	107
TSS (mg/l)	< 3
Total Calcium (mg/l)	184
Total Iron (mg/l)	0.07
Total Manganese (mg/l)	0.004
Total Magnesium (mg/l)	97.9
Selenium (mg/l)	0.009

At the same time, WVDEP determined that Buckles Branch's West Virginia Stream Index ("WVSCI") Score was 79.25.

3. Post Fill Construction

The United States Environmental Protection Agency ("EPA") performed two benthic assessments on Buckles Branch at approximately 38.23306667 N, 81.20697222 W in 2008. That effort produced the following results:

Date	Conductivity (µS/cm)	Total Rapid Bioassessment Protocol Score	WVSCI Score
April 16, 2008	1044	154	47.53
July 15, 2008	1490	n/a	67.21

WVDEP's Watershed Assessment Branch sampled the water quality in the Buckles Branch of Twentymile Creek for a third time on or about April 30, 2010. The sample was taken at mile point 0.7 with the approximate coordinates of 38° 13' 56.29"N, 81° 12' 22.46"W. WVDEP reported the following chemistry results:

Parameter	**Result**
pH (SU)	7.81
Hardness (mg/l)	1407.72
Chloride (mg/l)	20
Specific Conductance (µS/cm)	1831
Sulfate (mg/l)	1130
Alkalinity (mg/L $CaCO_3$)	97
TSS (mg/l)	< 2
TDS (mg/l)	1570
Total Calcium (mg/l)	290
Total Iron (mg/l)	0.08
Total Manganese (mg/l)	0.005
Total Magnesium (mg/l)	166
Potassium (mg/l)	11.3
Sodium (mg/l)	38.9
Selenium (mg/l)	0.0167

At the same time, WVDEP determined that Buckles Branch's West Virginia Stream Index ("WVSCI") Score was 60.69. WVDEP has listed Buckles Branch as biologically impaired since the 2012 303(d) list. Twentymile Creek is also biologically impaired.

KEC was ordered by WVDEP to include all selenium data in its latest WV/NPDES modification application for WV/NPDES reissuance. The following measurements were reported:

Sample Date	Location	Selenium Concentration (µg/L)
1/7/2011	038	5.69
1/28/2011	038	6.2
2/4/2011	038	6.93
3/25/2011	038	6.49
4/11/2011	038	5.10
4/25/2011	038	6.65
5/10/2011	038	6.91
5/23/2011	038	7.97
6/15/2011	038	8.61
6/28/2011	038	6.25
7/11/2011	038	7.15
7/22/2011	038	6.61

8/16/2011	038	6.93
8/29/2011	038	7.06
9/13/2011	038	6.09
9/29/2011	038	5.62
10/5/2011	038	7.01
10/25/2011	038	7.77
11/3/2011	038	8.32
11/20/2011	038	5.70
12/2/2011	038	6.45
12/15/2011	038	6.71
1/4/2012	038	5.87
1/18/2012	038	5.3
8/21/2012	038	6.33
9/6/2012	038	4.54
9/24/2012	038	5.36
10/3/2012	038	4.91
10/15/2012	038	5.93
11/9/2012	038	6.52
11/26/2012	038	6.71
12/20/2012	038	4.90
12/27/2012	038	5.51
1/3/2013	038	4.65
1/6/2011	DSBB	5.27
1/20/2011	DSBB	4.98
2/3/2011	DSBB	5.16
2/17/2011	DSBB	6.17
3/4/2011	DSBB	4.55
3/28/2011	DSBB	6.36
4/26/2011	DSBB	5.32
4/27/2011	DSBB	6.27
5/4/2011	DSBB	5.23
5/18/2011	DSBB	5.28
6/1/2011	DSBB	8.10
6/24/2011	DSBB	6.17
7/6/2011	DSBB	5.91
7/20/2011	DSBB	5.71
8/3/2011	DSBB	5.75
8/17/2011	DSBB	4.97
9/11/2011	DSBB	5.85
9/29/2011	DSBB	5.80
10/4/2011	DSBB	6.71
10/25/2011	DSBB	6.40
11/2/2011	DSBB	6.84
11/14/2011	DSBB	5.56
12/1/2011	DSBB	5.44

12/14/2011	DSBB	4.71
1/3/2012	DSBB	4.35
1/27/2012	DSBB	4.32
9/7/2012	DSBB	5.36
9/17/2012	DSBB	5.43
10/5/2012	DSBB	5.55
10/17/2012	DSBB	5.29
11/2/2012	DSBB	4.39
12/19/2012	DSBB	3.98
1/10/2012	DSBB	5.45
1/22/2013	DSBB	5.32
2/11/2013	DSBB	5.91
2/22/2013	DSBB	6.91
3/6/2013	DSBB	6.18
3/20/2013	DSBB	4.60
4/3/2013	DSBB	4.47
4/18/2013	DSBB	4.96
5/2/2013	DSBB	5.46
5/14/2013	DSBB	5.37
6/4/2013	DSBB	5.13
6/20/2013	DSBB	4.70
7/10/2013	DSBB	4.81
7/24/2013	DSBB	3.30
8/7/2013	DSBB	4.71
8/22/2013	DSBB	4.79
9/25/2013	DSBB	5.49

KEC also submitted samples from outlet 034 and 038 in its latest WV/NPDES application. The following measurements were reported:

Sampling Date	Sampling Location	Conductivity (µS/cm)	Sulfates (mg/L)	Iron (mg/L)	Manganese (mg/L)	Calcium (mg/L)	Magnesium (mg/L)
January 11, 2013	034	2630	1100	0.0598	0.0325	261	236.5
January 16, 2013	034	986	n/a	n/a	n/a	n/a	n/a
May 2, 2013	034	3590	n/a	0.141	0.309	n/a	n/a
December 26, 2012	038	n/a	653	0.151	0.0349	136	109

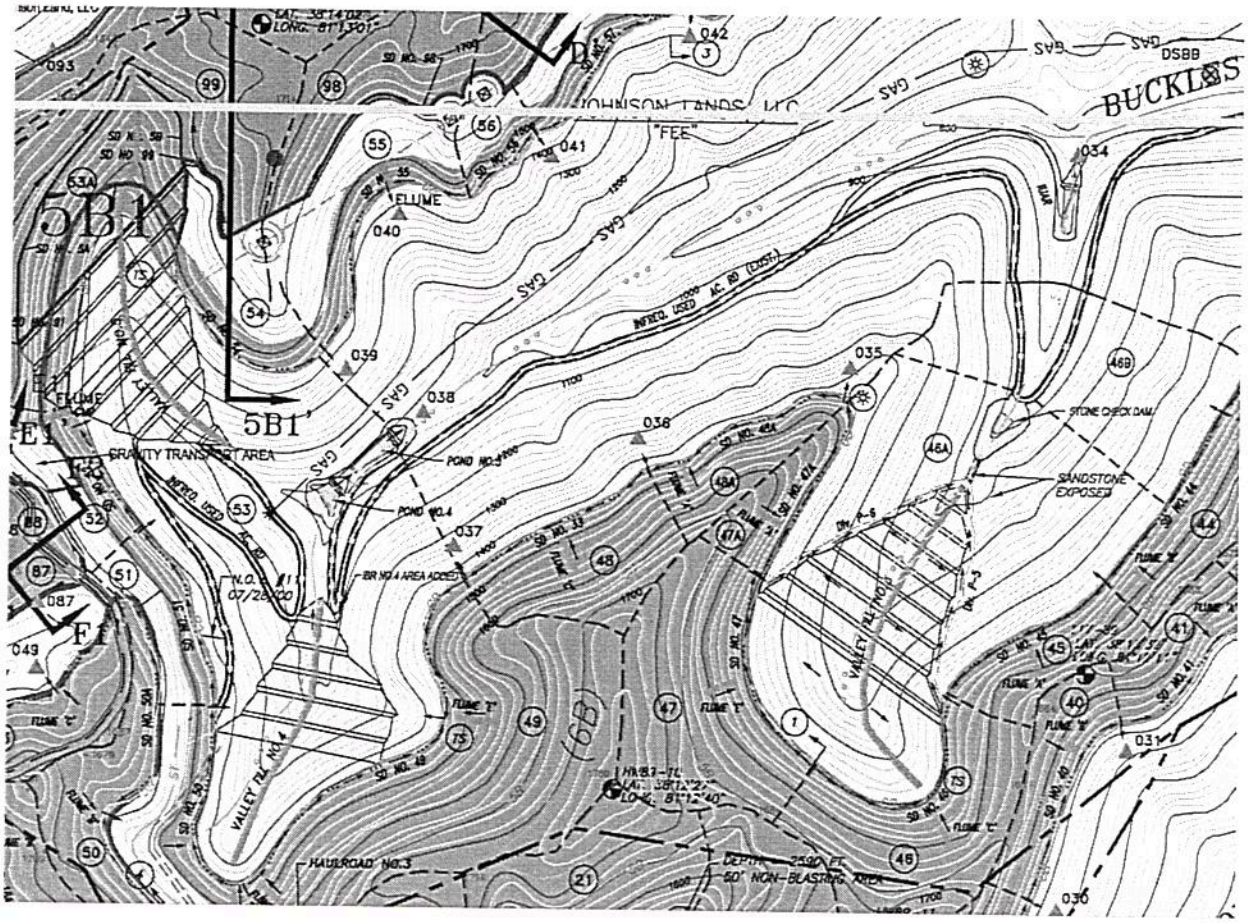
KEC submitted samples from outlet 034 and DSBB between September 2013 and August 2014 with its application for Modification # 9 of WV/NPDES Permit WV1002376. The averages of the results of that sampling were as follows:

Sampling Location	Parameter	2013-2014 Average Result
034	Specific Conductance (µS/cm)	1726
034	Total Iron (mg/l)	0.365
034	Total Manganese (mg/l)	0.1227
DSBB	Specific Conductance (µS/cm)	1573
DSBB	Sulfate (mg/l)	648
DSBB	TDS (mg/l)	1084
DSBB	Alkalinity (mg/L $CaCO_3$)	161.5
DSBB	Total Calcium (mg/l)	1326
DSBB	Total Iron (mg/l)	0.261
DSBB	Total Manganese (mg/l)	0.607
DSBB	Total Magnesium (mg/l)	948
DSBB	Selenium (µg/l)	5.3113

On January 8, 2014, a water sampler hired by Sierra Club took water samples just downstream of the discharge from the valley fills on Buckles Branch. The samples were taken in Buckles Branch, just above where it enters Twentymile Creek at approximately 38° 13' 59.20" N, 81° 11' 43.62" W. The results of that sampling effort were:

Parameter	Result
Hardness (mg/l)	687.70
Chloride (mg/l)	2.42
Specific Conductance (µS/cm)	1266
Sulfate (mg/l)	564.24
Alkalinity (mg/L $CaCO_3$)	111.48
TSS (mg/l)	9
TDS (mg/l)	996
Total Calcium (mg/l)	116.3
Total Iron (mg/l)	0.08
Total Manganese (mg/l)	0.017
Total Magnesium (mg/l)	96.47
Sodium (mg/l)	35.84
Selenium (mg/l)	9.12

The relevant valley fills, outfalls, and instream monitoring point are shown on the map below:



Twelve on-bench outlets (035, 036, 037, 039, 040, 041, 042, 043, 044, 045, 046, and 091) on WV/NPDES Permit WV1002376 were permitted to discharge into Buckles Branch. Eleven of those outlets have not flowed in the past five years. Outlet 043 flowed in January and March of 2012, but reported no flows at all other times in the past five years.

The data for Buckles Branch regularly show selenium concentrations that exceed West Virginia's chronic water quality standard for selenium. Outlets 034 and 038 are the only potential sources of selenium in the watershed.

The data for Buckles Branch and Outlets 034 and 038 show that the mining operation and valley fills at the Buckles Branch site are causing significant impairment to Buckles Branch. Levels of chemical pollution are very high and the stream is biologically impaired.

Scientific research has shown that levels of conductivity above ~300 uS/cm and elevated ionic pollution such as high sulfate levels are common below Appalachian mine sites and lead to extirpation of invertebrate genera (EPA 2011; Bernhardt et al. 2012; Cormier and Suter 2013; Cormier et al. 2013a). In 2011, EPA scientists summarized the existing science connecting conductivity and biological degradation in an EPA report entitled, "A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams." That report, which was peer-reviewed by top scientists on EPA's Science Advisory Board, used EPA's standard method for deriving water quality criteria to derive a conductivity benchmark of 300 µS/cm. Id. at xiv-xv.

According to the species sensitivity distribution in the benchmark, on average, five percent of species are lost when conductivity rises to 295 µS/cm, over 50% are lost at 2000 µS/cm, and close to 60% are lost at 3000 µS/cm. Id. at 18. EPA considered potential confounding factors, including habitat, temperature, deposited sediments and pH, and concluded that none of them altered the relationship between conductivity and biological decline or the benchmark value of 300 µS/cm. Id. at 41, B-22. EPA found that the loss of aquatic species from increased conductivity was "a severe and clear effect." Id. at A-37. EPA also conducted a detailed causal assessment and concluded that there is a causal relationship between conductivity and stream impairment in West Virginia. Id. at A-39. Finally, EPA's benchmark report analyzed the relationship between the WVSCI biological impairment threshold and conductivity levels, and found that a WVSCI score of 64 (close to the impairment threshold of 68) corresponds to streams with conductivity of about 300 µS/cm on average. Id. at A-36. A statistical analysis included in the benchmark determined that at a conductivity level of 300 µS/cm a stream is 59% likely to be impaired and at 500 µS/cm a stream is 72% likely to be impaired. Id.

The ions found in Buckles Branch are consistent with those associated with coal mining pollution in this region (Pond et al. 2008; Palmer et al. 2010; Bernhardt and Palmer 2011; Lindberg et al. 2012; Pond et al. 2010; Pond et al. 2012; Pond et al. 2014; Kunz 2013). The ionic mixture of calcium, magnesium, sulfate, and biocarbonate in alkaline mine water causes the loss of aquatic macroinvertebrates in Appalachian areas where surface coal mining is prevalent; it is the mixture of ions that causes the biological impairment (Cormier et al. 2013b; Cormier and Suter 2013). This mixture also has significant adverse effects on fish assemblages (Hitt 2014; Hopkins 2013) and has toxic effects on aquatic life, including mayflies (Kunz 2013; Echols 2010; Kennedy 2004).

Bernhardt et al. (2012) concluded that:

> The extent of surface mining within catchments is highly correlated with the ionic strength and sulfate concentrations of receiving streams. Generalized additive models were used to estimate the amount of watershed mining, stream ionic strength, or sulfate concentrations beyond which biological impairment (based on state biocriteria) is likely. We find this threshold is reached once surface coal mines occupy >5.4% of their contributing watershed area, ionic strength exceeds 308 µS cm^{-1}, or sulfate concentrations exceed 50 mg L^{-1}.

Valley Fills No. 3, 4, and 5 on Mining Permit S304589 are the only valley fills and KEC's Big Creek No. 2 Surface Mine is the only development activity in the Buckles Branch watershed.

In sum, the available evidence shows that, for at least the last decade and as a result of KEC's mining operations at its Big Creek No. 2 Mine, Buckles Branch has had elevated chemical ions, including sulfate, calcium, magnesium, and bicarbonate, measured as increased conductivity, and since at least 2008, Buckles Branch has had biologically impaired aquatic life. Since Buckles Branhc is a tributary of Twentymile Creek, that creek has also suffered from increased pollutants as a result of KEC's mining operations.

In addition, because of solar heating of the sediment control ponds upstream of Outlets 034 and 038, the mine has discharged a pollutant (i.e., heat) that has caused or materially contributed to increased temperature in Buckles Branch which may be a contributing factor to the observed biological impairment. The mine has also discharged other pollutants from Outlets 034 and 038 (e.g., manganese, iron and other dissolved solids) that degrade the habitat of Buckles Branch by causing or materially contributing to increased embeddedness of the stream substrate, which may be another contributing factor to the observed biological impairment. These discharges and violations began when the mine began operating and are continuing.

B. Reporting Inconsistencies on WV/NPDES Permit WV1002376

Part C of WV/NPDES Permit WV1002376 incorporates by reference 47 CSR § 30-5.11.b, which provides that: "Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity." Part A of WV/NPDES Permit WV1002376 requires KEC to sample twice monthly from each outlet and report the results in Discharge Monitoring Reports ("DMRs"). Since February 2013, KEC has submitted DMRs that reported outlet 038 as not flowing. From before 2007 to January 2013, outlet 038 did not report a single month of no flow. During the period KEC reported no flows for outlet 038, the mine inspector for the Big Creek No. 2 Mine inspected and successfully sampled from outlet 038 on March 24, 2013, May 13, 2013, September 27, 2013, November 20, 2013, June 10, 2014, September 11, 2014, November 20, 2014, April 6, 2015, and August 4, 2015. Due to the nature of valley fills, outlets below valley fills are not precipitation induced and have persistent flows.

II. LEGAL CLAIMS

A. Clean Water Act Violations

1. Selenium

Section 301 of the CWA prohibits the discharge of any pollutant by any person, except in compliance with a permit. The WV/NPDES Permit at issue in this notice allows KEC to discharge specified pollutants into West Virginia's waters. Noncompliance with an NPDES Permit constitutes a violation of the CWA. Sierra Club v. Powellton Coal Co., LLC, 662 F. Supp. 2d 514, 516 (S.D. W. Va. 2009). Citizens may sue any person who violates a term or condition of an NPDES Permit. Id. at 517. KEC's WV/NPDES Permit prohibits discharges that cause or materially contribute to violations of applicable water quality standards. 47 C.S.R. § 30-5.1.f.

KEC's discharges into Buckles Branch have caused or materially contributed to violations of the chronic numeric standard for selenium in Buckles Branch. There are no other point sources contributing selenium to Buckles Branch between Outlet 034 and 038 on WV/NPDES Permit WV1002376 and the instream samples. The Sierra Club alleges that the elevated selenium level found in Buckles Branch is the result of discharges from WV/NPDES Permit WV1002376. Based on the available evidence and the absence of any corrective measures by KEC since the samples were taken, we believe KEC's violations to be ongoing. If

KEC does not cease those violations within 60 days, we intend to bring a citizen suit against KEC under Section 505 of the Clean Water Act.

2. Narrative Water Quality Standard

Noncompliance with an NPDES Permit constitutes a violation of the CWA. Sierra Club v. Powellton Coal Co., LLC, 662 F. Supp. 2d 514, 516 (S.D. W. Va. 2009). Citizens may sue any person who violates a term or condition of an NPDES Permit. Id. at 517. KEC's WV/NPDES Permit prohibits discharges that cause violations of applicable water quality standards. 47 C.S.R. § 30-5.1.f. WVDEP defines its applicable water quality standards to include narrative standards. 47 C.S.R. § 2-3.2. In addition, federal regulations require states to issue NPDES permits that require compliance with "State narrative criteria for water quality." 40 C.F.R. §§ 122.44(d)(1), 123.25(a)(15).

Citizens may enforce this type of permit condition that requires compliance with narrative state water quality standards. Northwest Envtl. Advocates v. City of Portland, 56 F.3d 979, 986-988 (9th Cir. 1995); New Manchester Resort & Golf, LLC v. Douglasville Development, LLC, 734 F. Supp.2d 1326, 1336-39 (N.D. Ga. 2010) (allowing citizen enforcement of narrative water quality standard prohibiting water discoloration); Swartz v. Beach, 229 F. Supp.2d 1239, 1270-72 (D. Wyo. 2002) (allowing citizen enforcement of narrative water quality standard prohibiting water degradation that causes a measurable decrease in crop or livestock production); . "[S]tate standards, including narrative as opposed to numerical criteria, incorporated into an NPDES permit may be enforced through a citizens' suit." Gill v. LDI, 19 F. Supp. 2d 1188, 1195 (W.D. Wash. 1998).

West Virginia's narrative water quality standard provides that:

> No . . . wastes present in any waters of the state shall cause therein or materially contribute to any of the following conditions thereof: . . .
>
> 3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life; . . . and
>
> 3.2.i. Any other condition . . . which adversely alters the integrity of the waters of the State including wetlands; no significant adverse impacts to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

47 C.S.R. §§ 2-3.2.e & 2-3.2.i. Thus, the standard is violated if wastes discharged from a mining operation "cause" or "materially contribute" materials "that are harmful . . . or toxic to . . . aquatic life" or that have "significant adverse impacts to . . . biological components of aquatic ecosystems." "Biological monitoring is one method of testing [for] compliance with narrative criteria." American Paper Institute, 996 F.2d 346, 350 (D.C. Cir. 1993).

KEC's discharges of an ionic mixture of chemicals, including sulfate, calcium, magnesium, and bicarbonate, measured as conductivity, into Buckles Branch have violated the "harmful . . . to . . . aquatic life" and "significant adverse impact" components of this narrative

standard. In 2008 and 2010, EPA and WVDEP, respectively, measured the benthic community in Buckles Branch downstream from KEC's discharges from Outlet 038 and found that the WVSCI score was below 68, the threshold above which a stream is not biologically impaired. KEC's, Sierra Club's, and WVDEP's instream sampling of Buckles Branch have also continued to show high levels of ionic chemicals such as sulfates and high levels of conductivity, which are strongly associated with biological impairment and harm to aquatic life.

Since KEC's Big Creek No. 2 Mine is the only development activity in the Buckles Branch watershed, its discharges have caused, or materially contributed to, violations of the narrative state water quality standards, its NPDES permit and the CWA. See Upper Chattahoochee Riverkeeper v. City of Atlanta, 986 F. Supp. 1406, 1427 (N.D. Ga. 1997) (city found liable for violating water quality standard for fecal coliform bacteria because its "discharges correlate generally (although not perfectly) with measurements of fecal coliform bacteria in the receiving streams that are thousands of times higher than they should be" and there was no "other source that is contributing such massive amounts of fecal coliform bacteria to explain the level of fecal coliform bacteria in the receiving streams below" its treatment facilities). Based on the available evidence and the absence of any corrective measures by KEC since the samples were taken, we believe KEC's violations are ongoing. KEC's violations occurred on every day when there was flow from Outlet 034 and 038 because those Outlets contribute most of the flow to Buckles Branch. If KEC does not cease those violations within 60 days, we intend to bring a citizen suit against KEC under Section 505 of the Clean Water Act.

3. Reporting Violations

Noncompliance with an NPDES Permit constitutes a violation of the CWA. Sierra Club v. Powellton Coal Co., LLC, 662 F. Supp. 2d 514, 516 (S.D. W. Va. 2009). Citizens may sue any person who violates a term or condition of an NPDES Permit. Id. at 517. KEC's WV/NPDES Permit mandates that samples taken for the purpose of monitoring must be representative of the activity. The section of WV/NPDES Permit WV1002376 that requires monitoring of outlet 038 is entitled, "Discharge Limitations and Monitoring Requirements" and subtitled, "Effluent Limitations and Monitoring Frequency." Sampling for DMRs are clearly taken for the purpose of monitoring. Reporting two years of no flows from an outlet that does flow is not representative. KEC's no flow reports from outlet 038 violate its NPDES permit and the CWA. Based on the available evidence and the absence of any corrective reports by KEC, we believe KEC's violations are ongoing. KEC's violations occurred every time a non-representative no flow sample was reported. If KEC does not cease those violations within 60 days, we intend to bring a citizen suit against KEC under Section 505 of the Clean Water Act.

B. SURFACE MINING VIOLATIONS

Section 520(a)(1) of SMCRA authorizes citizens to commence civil actions against any person alleged to be in violation of rules, orders, or permits issued pursuant to SMCRA. 30 U.S.C. § 1270(a)(1). West Virginia has a federally-approved mining program under SMCRA which is administered by the WVDEP pursuant to the West Virginia Surface Coal Mining Reclamation Act ("WVSCMRA"), W. Va. Code § 22-3-1 through 32a. Powellton, 662 F. Supp. at 518. Violations of a federally-approved state program are enforceable in federal court under

SMCRA's citizen suit provision. Molinary v. Powell Mountain Coal Co., Inc., 125 F.3d 231, 237 (4th Cir. 1997). The Sierra Club alleges that KEC is in continuous and ongoing violation of the following:

(1) 38 C.S.R. § 2-14.5, promulgated under WVSCMRA;
(2) 30 C.F.R. §§ 816.41(a) and 817.41(a), promulgated under SMCRA;
(3) 30 C.F.R. §§ 816.42 and 817.42, promulgated under SMCRA;
(4) The permit conditions incorporated into West Virginia Surface Mining Permit S304589 by operation of 38 C.S.R. § 2-3.33.c, promulgated under WVSCMRA.

KEC's SMCRA-related violations began at least in April 2008, when benthic sampling conducted in Buckles Branch revealed that the stream is biologically impaired.

Section 506 of SMCRA prohibits surface coal mining operations without a permit from the Office of Surface Mining Reclamation and Enforcement ("OSMRE") or from an approved state regulatory authority. 30 U.S.C. § 1256. KEC holds mining permit S304589 from WVDEP for the Big Creek No. 2 Mine. The WVSCMRA provides that "[a]ny permit issued by the director pursuant to this article to conduct surface mining operations shall require that the surface mining operations meet all applicable performance standards of this article and other requirements set forth in legislative rules proposed by the director." W. Va. Code § 22-3-13(a). In turn, WVDEP's regulations under that statute provide that "[t]he permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Act, and this rule." 38 C.S.R. § 2-3.33.c; Powellton, 662 F. Supp.2d at 518.

The federal performance standards under SMCRA mandate that all discharges from permitted mining operations "be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 C.F.R. Part 434. 30 C.F.R. §§ 816.42 & 817.42. The State program prescribes a similar standard: "Discharge from areas disturbed by surface mining shall not violate effluent limitations or cause a violation of applicable water quality standards." 38 C.S.R. § 2-14.5.b (emphasis added).

As described above, KEC's discharges from the Big Creek No. 2 Mine into Buckles Branch have caused violations of the narrative water quality standards for protection of aquatic life and the chronic numeric standard for selenium. Consequently, KEC is in violation of the state and federal performance standards that prohibit mining operations from causing violations of water quality standards.

In addition, KEC's mining operations have resulted in impermissible material damage to the hydrologic balance. The performance standards under WVSMCRA mandate that "[a]ll surface mining and reclamation activities shall be conducted . . . to prevent material damage to the hydrologic balance outside the permit area." 38 C.S.R. § 2-14.5. At a minimum, "material damage" includes violations of water quality standards. Ohio River Valley Environmental Coalition, Inc. v. Castle, Civ. No. 3:00-cv-0058, Memo. Opinion & Order at 12-13 (S.D. W. Va. June 14, 2000). Accordingly, the water quality standards violations described above constitute

material damage to the hydrologic balance and are actionable in a SMCRA citizen suit against KEC.

Moreover, KEC has a legal duty to treat its effluent to ensure that it does not violate water quality standards. Federal and State performance standards require that, "[i]f drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and § 816.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls." 30 C.F.R. § 816.41(d)(1); see also 38 C.S.R. § 2-14.5.c ("Adequate facilities shall be installed, operated and maintained using the best technology currently available in accordance with the approved preplan to treat any water discharged from the permit area so that it complies with the requirements of subdivision 14.5.b of this subsection.") The violations identified herein show unequivocally that KEC's existing treatment methods are insufficient to meet that requirement. Thus, the performance standards require KEC to construct systems that will effectively treat its effluent to levels that comply with all applicable water quality standards.

Finally, KEC's violations of the performance standards that prohibit violations of water quality standards and material damage and that require adequate treatment to avoid such violations are violations of Surface Mining Permit S304589. By operation of 38 C.S.R. § 2-33.c, that surface mining permit incorporates the performance standards discussed in this letter as terms of the permit itself. Consequently, KEC is violating its SMCRA permit.

III. CONCLUSION

As discussed above, if KEC fails to come into compliance with the Clean Water Act; the terms of WV/NPDES Permit WV1002376; SMCRA; surface mining regulations; and the permit conditions of Surface Mining Permit S304589, we intend to file a citizen suit under section 505(a)(1) of the Clean Water Act seeking civil penalties and injunctive relief, as well as a citizen suit under section 520(a)(1) of SMCRA seeking a court order compelling KEC to come into compliance with the law. Be aware that this notice is sufficient to allow us to sue KEC for any post-notice violations related to the violations described herein. See generally, Public Interest Research Group of N.J., Inc. v. Hercules, Inc., 50 F.3d 1239 (3rd Cir. 1995).

If KEC has taken any steps to eradicate the underlying cause of the violations described above, or if KEC believes that anything in this letter is inaccurate, please let us know. If KEC does not advise us of any remedial steps or inaccuracies in our information during the 60-day period, we will assume that no such steps have been taken, the information in this letter is accurate, and that violations have occurred and are likely to continue. Additionally, we would be happy to meet with KEC or its representatives to attempt to resolve these issues within the 60-day notice period.

Sincerely,

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